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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,756	12/24/2003	Steven N. Simon	P3136-938	8932
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			ART UNIT 2146	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/743,756

Applicant(s)

SIMON ET AL.

Examiner

Guang Li

Art Unit

2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. The instant application having Application No. 10/743756 has a total of 51 claims pending in the application; there are 5 independent claims and 46 dependent claims, all of which are ready for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 28-43 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As the specification discloses (§[0015]), "The computer- readable medium can be , for example but **is not limited to** , an electronic, magnetic, optical, **electromagnetic**, infrared, or semiconductor system, apparatus, device or **propagation medium**". Propagation media in the context of this disclosure covers signals and carrier waves, which are not fallen within the meaning of 101. The transmission media are forms of energy, per se, and thus currently not believed to fall within a statutory category.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2 and 29 recite the limitation "Primary or backup" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether primary or search procedures or both that applicant claimed for.

7. Claims 8-10, 24-26, 35-37, 45-47 and 49-51 recite the limitation "whether the server computer is running on the same CPU... and determine the network address of the server computer". There is insufficient antecedent basis for this limitation in the claims. It is unclear how client determines server network address when running on the same CPU as client computer.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 3-4, 11, 14, 16-17, 19-20, 27-28, 30-31, 38, 43-45, 47-49 and 51 are rejected under 35 U.S.C. 102 (e) as being anticipated by Kumar et al. (US 6,795,434).

10. Regarding claim 1, Kumar teaches a method for a client computer to find a network address of a server computer (The RSD further records responses from servers addressed by the server addresses and then sorts the server addresses according to the responses and types of data involved in transactions see col.2 lines 27-31), the method comprising searching for a network address (Best replicated server see

col.2 line 23) of the server computer using a backup search procedure (DNS lookup as backup search procedure "If the requested URL host name is not in the cache, the process proceeds from block 402 to block 404, where the process initiates a DNS lookup for the requested URL host name see col.5 lines 34-37") if the address of the server computer cannot be identified using a primary search procedure (Searching the URL in the memory cache "The process proceeds to block 402 to examine whether the requested URL host name is in the local cache memory" see col.5 lines 27-28).

11. Regarding claim 3, Kumar teaches the method of claim 1 wherein the primary procedure includes searching a local storage of the client computer system (cache directory to determined whether the URL is already in the cache "The comparing unit 506 examines the cache directory 520 to determine whether the URL is already in the cache 522" see col.6 lines 36-41).

12. Regarding claim 4, Kumar teaches the method of claim 3 wherein the backup search procedure includes: searching a configuration record of the client computer system for the network address of the server computer (DNS lookup in the server computer for relating to the requested URL "Upon initiating a DNS lookup, DNS searches and collects addresses relating to the requested URL host name" see col.5 lines 38-40).

13. Regarding claim 11, Kumar teaches the method of claim 1 further comprising the step of establishing a connection with the server computer with the network address found (Once detect the most preferred server address and establish to the server "The address listed on the top of the sorted preferred list is the most preferred server

address, which points to the most preferred server or the optimal site is addressed by the most preferred server address" see col.7 lines 48-56).

14. Regarding claim 14, Kumar teaches the method of claim 11 further comprising the step of populating a local storage of the client computer with a list of network addresses for server computers after the connection has been established (update the list of the server network address "At block 854, the process sorts the addresses into a preferred list of site addresses according to the responses and data types" see col.9 lines 14-21).

15. Regarding claim 16, Kumar teaches the method of claim 1 wherein the primary and backup search procedures are performed in parallel (either can based on hit and miss ratio or DNS lookup "the comparing unit 506 issues a message of cache-miss to indicate that IP server addresses are not in the cache 522. Both the message of cache-miss and the message of cache-hit, which could be configured to one message, are sent to the selecting unit 510 and DNS lookup unit 508" see col.6 lines 44-47).

16. Regarding claim 17, claim 17 is rejected for the same reasons as claim 1 set forth hereinabove. Regarding claim 17, Kumar taught the claimed method, therefore together, he teaches the claimed system (typical computer system 200 in which RSD operates. RSD can be implemented on any processor-based computer system or a system capable of implementing the Internet proxy, such as a personal computer ("PC"), a workstation, or a mainframe computer. It will be apparent to those of ordinary skill in the art that other alternative computer system architectures may also be employed see col.4 lines 4-10).

17. Regarding claims 19-20, they are rejected for the same reason as claims 3-4 as set forth hereinabove.

18. Regarding claim 27, claim 27 is rejected for the same reason as claim 16 as set forth hereinabove.

19. Regarding claim 28, claim 28 is rejected for the same reasons as claim 1 set forth hereinabove. Regarding claim 28, Kumar taught the claimed method, therefore together, he teaches the claimed computer readable medium.

20. Regarding claims 30-31, they are rejected for the same reason as claims 3-4 as set forth hereinabove.

21. Regarding claim 27, claim 27 is rejected for the same reason as claim 16 as set forth hereinabove.

22. Regarding claim 38, claim 38 is rejected for the same reason as claim 11 as set forth hereinabove.

23. Regarding claim 41, claim 41 is rejected for the same reason as claim 14 as set forth hereinabove.

24. Regarding claim 43, claim 43 is rejected for the same reason as claim 16 as set forth hereinabove.

25. Regarding claim 44, Kumar teaches a method of a client computer to locate a network address of a server computer on a computer network (The RSD further records responses from servers addressed by the server addresses and then sorts the server addresses according to the responses and types of data involved in transactions see col.2 lines 27-31), the method comprising the following steps:

searching for the address of the server computer in a local system storage of the client computer (Searching the URL in the memory cache “The process proceeds to block 402 to examine whether the requested URL host name is in the local cache memory” see col.5 lines 27-28); and

performing a backup search procedure if the address is not found in the local system storage (DNS lookup as backup search procedure “If the requested URL host name is not in the cache, the process proceeds from block 402 to block 404, where the process initiates a DNS lookup for the requested URL host name see col.5 lines 34-37”).

26. Regarding claim 45, Kumar teaches the method of claim 44 wherein the backup search procedure is selected from the group of search procedures consisting of: broadcasting a message over the network to identify the address of the server computer; searching an authentication record for the address of the server computer; using a loop back address to connect to the server computer; using a inter process communication to determine whether the server computer is running on a same CPU as the client computer in order to determine the network address; and searching a configuration record of the client computer for the address of the server computer (DNS lookup in the server computer for relating to the requested URL “Upon initiating a DNS lookup, DNS searches and collects addresses relating to the requested URL host name” see col.5 lines 38-40).

27. Regarding claim 47, Kumar teaches the method of claim 45 wherein the backup search procedure is performed in parallel with searching the local system storage of the

client (either can based on hit and miss ratio or DNS lookup “the comparing unit 506 issues a message of cache-miss to indicate that IP server addresses are not in the cache 522. Both the message of cache-miss and the message of cache-hit, which could be configured to one message, are sent to the selecting unit 510 and DNS lookup unit 508” see col.6 lines 44-47).

28. Regarding claim 48, Kumar teaches a system for finding a network address (The RSD further records responses from servers addressed by the server addresses and then sorts the server addresses according to the responses and types of data involved in transactions see col.2 lines 27-31), the system comprising:

server means having a network address (DNS server address “the RSD is configured to receive server addresses using Domain Name System (“DNS”) lookup, where the server addresses include replicated server addresses see abstract); and

client means for searching for the network address of the server means by searching for the address of the server means in a local system storage of the client means (Searching the URL in the memory cache “The process proceeds to block 402 to examine whether the requested URL host name is in the local cache memory” see col.5 lines 27-28), and using a backup search procedure to identify the address of the server means if the address is not found in the local system storage (DNS lookup as backup search procedure “If the requested URL host name is not in the cache, the process proceeds from block 402 to block 404, where the process initiates a DNS lookup for the requested URL host name see col.5 lines 34-37”).

29. Regarding claim 49, claim 49 is rejected for the same reasons as claim 45 set forth hereinabove. Regarding claim 49, Kumar taught the claimed method, therefore together, he teaches the claimed system.

30. Regarding claim 51, claim 51 is rejected for the same reason as claim 47 as set forth hereinabove.

Claim Rejections - 35 USC § 103

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claims 2, 5, 7-9, 12-13, 15, 18, 32, 34-36, 39-40, 42, 46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (US 6,795,434) in view of Lavian (US 7, 039,724).

33. **Regarding claims 2, 5, 18, 21, 29, 32 and 46**, Kumar teaches a method for a client computer to find a network address of sever computer, the method comprising searching for a network address of the server computer using a backup search procedure if the address of the server computer cannot be identified using a primary search procedure. Kumar further teaches primary procedure includes searching a local storage of the client computer system (cache directory to determined whether the URL is already in the cache "The comparing unit 506 examines the cache directory 520 to determine whether the URL is already in the cache 522" see col.6 lines 36-41) and

searching a configuration record of the client computer system for the network address of the server computer (DNS lookup in the server computer for relating to the requested URL "Upon initiating a DNS lookup, DNS searches and collects addresses relating to the requested URL host name" see col.5 lines 38-40).

Kumar does not explicitly disclose wherein the server computer is a password server computer having a public key to search for the address of the server computer.

Lavian teaches wherein the server computer is a password server computer (This can be accomplished by reading a predetermined segment of the transmission for identification information such as a login and password see col.11 lines 41-43) having a public key to search for the address of the server computer (the network management application can use SSL or a public-key encryption scheme to encrypt the data see col.11 lines 32-38). Lavian further provides the advantage of a network having network management capabilities, includes a non-application enabled network device having CLI capable of controlling one or more network management aspects of the non-application enabled network device see (col.2 lines 25-34).

It would have been obvious to one of ordinary skill in the art, having the teachings of Kumar and Lavian before them at the time the invention was made to modify the method to find a network address of a server computer of Kumar to include server computer is a password server computer having a public key to search for the address of the server computer as taught by Lavian.

One of ordinary skill in the art would have been motivated to make this modification in order to provide an alternate way finding network address for prevent fault tolerant and security purpose of Lavian.

34. **Regarding claims 7, 23 and 34**, Kumar teaches a method for a client computer to find a network address of sever computer, the method comprising searching for a network address of the server computer using a backup search procedure if the address of the server computer cannot be identified using a primary search procedure. Kumar further teaches primary procedure includes searching a local storage of the client computer system (cache directory to determined whether the URL is already in the cache "The comparing unit 506 examines the cache directory 520 to determine whether the URL is already in the cache 522" see col.6 lines 36-41).

Kumar does not explicitly disclose using authentication record to determine the network address of the server computer.

Lavian teaches using authentication record to determine the network address of the server computer (after the client authenticate the server and able to access the network address of server computer "authentication server 110 may also determine if a network device within communication system 100 has proper authorization to download an application" see col.4 lines 21-34).

It would have been obvious to one of ordinary skill in the art, having the teachings of Kumar and Lavian before them at the time the invention was made to modify the method to find a network address of a server computer of Kumar to include

using authentication record to determine the network address of the server computer as taught by Lavian.

One of ordinary skill in the art would have been motivated to make this modification in order to provide an alternate way finding network address for prevent fault tolerant of Lavian.

35. **Regarding claims 8-9, 24-25 and 35-36,** Kumar teaches a method for a client computer to find a network address of sever computer, the method comprising searching for a network address of the server computer using a backup search procedure if the address of the server computer cannot be identified using a primary search procedure. Kumar further teaches primary procedure includes searching a local storage of the client computer system (cache directory to determined whether the URL is already in the cache "The comparing unit 506 examines the cache directory 520 to determine whether the URL is already in the cache 522" see col.6 lines 36-41).

Kumar does not explicitly disclose wherein the backup search procedure comprises the step of determining whether the server computer is running on the same CPU as client computer and using the loopback address.

Lavian teaches wherein the backup search procedure comprises the step of determining whether the server computer is running on the same CPU as client computer and using the loopback address (using the loopback address to test whether the device is local node or not "This loopback address is a self-referential address which identifies the local network device on the network without sending packets of information over the actual network" see col. 10 lines 44-50).

It would have been obvious to one of ordinary skill in the art, having the teachings of Kumar and Lavian before them at the time the invention was made to modify the method to find a network address of a server computer of Kumar to include wherein the backup search procedure comprises the step of determining whether the server computer is running on the same CPU as client computer and using the loopback address taught by Lavian.

One of ordinary skill in the art would have been motivated to make this modification in order to efficient using resource and testing connectivity between the nodes of Lavian.

36. **Regarding claims 12-13, 15, 39-40 and 42,** Kumar teaches a method for a client computer to find a network address of sever computer, the method comprising searching for a network address of the server computer using a backup search procedure if the address of the server computer cannot be identified using a primary search procedure. Kumar further comprising the step of establishing a connection with the server computer with the network address found (Once detect the most preferred server address and establish to the server "The address listed on the top of the sorted preferred list is the most preferred server address, which points to the most preferred server or the optimal site is addressed by the most preferred server address" see col.7 lines 48-56).

Kumar does not explicitly disclose authenticating the server computer after the connection has been established and server computer is a password server computer.

Lavian teaches authenticating the server computer after the connection has been established (This may include performing authentication and authorization of the user and application see col. 12 lines 26-33) and server computer is a password server computer (server contain password database to performing authentication of user "obtaining a login name, an application identification, and/or a password" see col.12 lines 24-29).

It would have been obvious to one of ordinary skill in the art, having the teachings of Kumar and Lavian before them at the time the invention was made to modify the method to find a network address of a server computer of Kumar to include authenticating the server computer after the connection has been established taught by Lavian.

37. One of ordinary skill in the art would have been motivated to make this modification in order to provide security purpose of Lavian.

38. Claims 6, 22 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (US 6,795,434) in view of Fraser (US 5,434,914).

39. Regarding claims 6, 22 and 33, Kumar teaches a method for a client computer to find a network address of sever computer, the method comprising searching for a network address of the server computer using a backup search procedure if the address of the server computer cannot be identified using a primary search procedure. Kumar further teaches primary procedure includes searching a local storage of the client computer system (cache directory to determined whether the URL is already in the

cache "The comparing unit 506 examines the cache directory 520 to determine whether the URL is already in the cache 522" see col.6 lines 36-41).

Kumar does not explicitly disclose performing a broadcast procedure over the network in order to determine the network address of the computer server.

Fraser teaches performing a broadcast procedure over the network in order to determine the network address of the computer server (The source node might respond to an unknown destination message by sending a broadcast message to all other nodes to determine which node currently has a network address corresponding to the name, and the node having the corresponding network address might send a message to the broadcasting node see col. 11 lines 14-26).

It would have been obvious to one of ordinary skill in the art, having the teachings of Kumar and Fraser before them at the time the invention was made to modify the method to find a network address of a server computer of Kumar to include performing a broadcast procedure over the network in order to determine the network address of the computer server as taught by Fraser.

One of ordinary skill in the art would have been motivated to make this modification in order to provide an alternate way finding network address for prevent fault tolerant ad security purpose of Fraser.

40. Claims 10, 26 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (US 6,795,434) in view of Lavian (US 7, 039,724) and in further view of Fraser (US 5,434,914).

41. Regarding claims 10, 26 and 37, Kumar together with Lavian taught the a method for a client computer to find a network address of sever computer, the method comprising searching for a network address of the server computer using a backup search procedure if the address of the server computer cannot be identified using a primary search procedure. Kumar further teaches primary procedure includes searching a local storage of the client computer system and determining whether the server computer is running on the same CPU as the client computer according to claim 8 as set hereinabove.

Kumar together with Lavian do not explicitly discloses determining whether the server computer is running on a CPU of the client computer comprises sending out an inter process communication to the CPU.

Fraser teaches determining whether the server computer is running on a CPU of the client computer comprises sending out an inter process communication to the CPU (communication between the components may be by means of function invocations or inter-process communications see col.8 lines 35-38). Fraser further provides the advantage of a translation of a name into a network address done in a first node of a network (see col.3 lines 14-16).

It would have been obvious to one of ordinary skill in the art, having the teachings of Kumar and Lavian before them at the time the invention was made to modify the method to find network address of server computer of Kumar to includes whether the server computer is running on a CPU of the client computer comprises sending out an inter process communication to the CPU as taught by Fraser.

One of ordinary skill in the art would have been motivated to make this modification in order to provide unique way communication between the components for improve communication system in view of Fraser.

Conclusion

The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

The following reference teaches execution of trial data.

- US 6,360,276 (Scott)
- US 5,687,320 (Wiley et al.)
- US 6,026,445(Kephart et al.)

The examiner requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.


When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guang Li whose telephone number is (571) 270-1897. The examiner can normally be reached on Monday-Friday 8:30AM-5:00PM(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 3, 2008
Guang Li
Patent Examiner


JEFFREY PWU
SUPERVISORY PATENT EXAMINER